- 2. (Original) The method of claim 1, wherein said barrier layer, said matrix layer or both are impregnated with glycosaminoglycan.
- 3. (Original) The method of claim 2, wherein the glycosaminoglycan is hyaluronic acid, chondroitin 6-sulphate, keratin sulphate or dermatan sulphate.
- 4.\(Original\) The method of claim 1 wherein the patch is fixed over the area to be treated by adhesively bonding the patch to cartilage surrounding said area to be treated.
- 5. (Original) The method of claim 1 wherein the patch is fixed over the area to be treated by suturing the patch to cartilage surrounding said area to be treated.
- 6. (Original) The method of claim 1 wherein said membrane material carries at least one pharmaceutically or biologically active substance or mesenchymal stem cells having ability to differentiate into cells to regenerate cartilage or bone.
- 7. (Original) The method of claim 6 in which the pharmaceutically active substance is selected from the group consisting Taurolidine, Taurultam and a mixture thereof.
- 8. (Original) The method of claim 6 in which the pharmaceutically active substance is selected from the group consisting of cell growth-promoting hormones, bone morphogenetic proteins (BMPs), other skeletal matrix molecules, and signaling peptides.
- 9. (Original) The method of claim 6 wherein the pharmaceutically active substance is selected from the group consisting of BMP-2, BMP-3, BMP-4, BMP-7, BMP-8, OP-1, PTH, TGF-β, TGF-β1, VEGF, CIP, IGF, PTHrP, PDGF and mixtures thereof.
- 10. (Original) The method of claim 1 wherein said membrane material carries articular cartilage stem cells or bone stem cells.
- 11. (Original) The method of claim 1 wherein said membrane material carries bone marrow stromal cells.
- 12. (Original) The method of claim 1 wherein said barrier layer has at least one smooth face so as to inhibit cell adhesion thereon, said barrier layer further having a fibrous face opposite said smooth face, wherein said matrix layer is adhered to said fibrous face.
- 13. (Original) The method of claim 1 further comprising implanting a resorbable bone mineral implant material into a region of bone injury in the area to be treated, prior to fixing said patch over said area to be treated.
- 14. (Original) The method of claim 13, wherein said bone mineral is charged with chondrocytes.



- 15. (Original) The method of claim 1, wherein said patch is charged with chondrocytes.
- 16. (Original) The method of claim 1 wherein said patch is comprised of a single barrier layer.
- 17. (Original) The method of claim 1 wherein said patch comprises said matrix layer sandwiched between one said barrier layer and a second said barrier layer.
- 18. (Original) The method of claim 1 wherein the matrix layer is provided by collagen II material derived from natural cartilage.
- 19. (Original) The method of claim 18 wherein the collagen II material is derived from hyaline cartilage from pigs.
- 20. (Original) The method of claim 18 wherein the collagen II material is physically cross-linked.
- 21. (Original) The method of claim 1 wherein said at least one barrier layer is predominately made up of collagen I, collagen III or mixtures thereof.
- 22. (Original) The method of claim 21 wherein said at least one barrier layer is derived from peritoneum membrane from calves or pigs.
- 23. (Original) The method of claim 1 wherein said patch is impregnated with a glycosaminoglycan.
- 24. (Original) The method of claim 23 wherein said glycosaminoglycan is hyaluronic acid, chondroitin 6-sulphate, carotin sulphate or dermatan sulphate.

